

REMARKS

This Response and Amendment is filed in response to the Office Action dated February 5, 2009. By way of this Amendment, claims 4-7, 21, 32-33, 35 and 39 are amended, claims 1-3, 8-20, 22-31, 36-38, 40 and 42 are cancelled, and claims 43-58 have been added. Therefore, claims 4-7, 21, 32-35, 39, 41, and 43-58 stand pending. No new subject matter has been added. Applicant respectfully requests allowance of all the pending claims.

Claim Rejections - 35 U.S.C. § 102(b)

Claims 1-3, 8, 10, 11, 13-15, 17, 19, 20, 22, 23 and 25 are rejected under 35 U.S.C. § 102(b) as being anticipated by Mussman (U.S. Patent No. 5,883, 394).

Independent claims 1 and 14 and dependent claims 2-3, 8, 10, 11, 13, 15, 17, 19, 20, 22, 23 and 25 have been cancelled, rendering the rejections under 35 U.S.C. § 102(b) moot.

Claim Rejections - 35 U.S.C. § 103(a)

Multiple rejections under 35 U.S.C. § 103(a) are made to the pending claims. Claims 9 and 18 are rejected as being unpatentable over Mussman in view of Baduro (U.S. Patent No. 4,638,166), claims 4 and 21 are rejected as being unpatentable over Mussman in view of Backus (U.S. Patent No. 3,770,964), claims 5-7, 16, and 24 are rejected as being unpatentable over Mussman in view of Rogers et al. (U.S. Patent No. 3,820,435), and claims 26-42 are rejected as being unpatentable over Rogers et al. in view of Mussman.

Independent claim 26 and dependent claims 9, 16, 18, 24, and 26-38 have been cancelled, rendering all rejections to said claims moot. Furthermore, the rejections under 35 U.S.C. § 103(a) cannot be applied to new independent claims 43, 49, 52 and 56. The cited references, alone or in combination, fail to teach the invention as recited in independent claims 43, 49, 52, and 56.

Claims 4-7 and 44-48 depend from allowable independent claim 43, claims 21 and 50-51 depend from allowable independent claim 49, claims 32-35 and 53-55 depend from allowable independent claim 52, and claims 57-58 depend from allowable independent claim 56. Therefore, dependent Claims 4-7, 21, 32-35, 44-48, 50-51, 53-55, and 57-58 are allowable for at least the above stated reasons and the rejections under 35 U.S.C. § 103(a) should be withdrawn.

Independent claim 39 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rogers et al. in view of Mussman *mutatis mutandis* independent claim 26. Claim 39 has been amended to recite, among other things, detonating the explosive device within the device containment vessel wherein the shield continues to minimize dispersal of radiation from the explosive device subsequent the explosion.

In contrast, Mussman discloses a radiation shield encompassing a portion of a pipe to minimize dispersal of radioactive material. The radiation shield (S1(X), S2(X)) of Mussman fails to disclose the ability to absorb and/or contain the intense pressures and forces experienced external a vessel during an explosion. More specifically, because the steel bands (12) extend completely around the pipe, if an explosive device were to be placed inside the pipe vessel, and subsequently detonated, any expansion of the pipe would cause the steel bands (12) to fail, causing the radiation shields (S1(X), S2(X)) to become ineffective at minimizing dispersal of radioactive material.

Rogers et al. does not cure the deficiencies of Mussmann. If the radiation shield of Mussman was incorporated about the confinement vessel (1) of Rogers et al. any expansion of the vessel as a result of the explosion would render the radiation shield susceptible to failure and unable to minimize dispersal of radiation from the explosive device as required in amended claim 39. Furthermore, it would not have been obvious to adapt the radiation shield of Mussman to include the ability to withstand an explosive event. The radiation shield of Mussman is disclosed being

adapted to a cylindrical pipe and hung from a rack neither of which experience the pressures and forces nor undergo the deformations that befall a vessel during detonation. Moreover, at no time does Mussman state that the shield may be used or adapted for use in an explosive environment, as required in claim 39.

Claim 41 is dependent from independent claim 39 and is allowable for at least the same reasons as stated above. As such, withdrawal of the rejection under 35 U.S.C. § 103(a) of claim 41 is respectfully requested.

In view of the amendments presented herein, Applicants believe that the claims as filed are in condition for allowance and respectfully requests a timely Notice of Allowance be issued for this case. Applicants kindly request that the Examiner telephone the attorney of record in the event a telephone discussion would be helpful in advancing the prosecution of the present application.

Respectfully submitted,



Gayle A. Bush
Reg. No. 52,677

File No. 093144-9030-00
Michael Best & Friedrich LLP
100 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4108
(414) 223-2509